

**EPA Superfund
Record of Decision Amendment:**

**SMITH'S FARM
EPA ID: KYD097267413
OU 01
BROOKS, KY
09/30/1991**

- REMEDIAL INVESTIGATION REPORT, SMITH'S FARM SITE
- FEASIBILITY STUDY REPORT, SMITH'S FARM SITE
- RECORD OF DECISION, SMITH'S FARM SITE, OPERABLE UNIT ONE
- PRELIMINARY AND INTERMEDIATE REMEDIAL DESIGN REPORTS, SMITH'S FARM SITE, OPERABLE UNIT ONE
- RESPONSIVENESS SUMMARY II, SMITH'S FARM SITE, OPERABLE UNIT ONE

DECLARATION

THIS MODIFIED REMEDY IS PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT, ATTAINS FEDERAL AND STATE REQUIREMENTS THAT ARE APPLICABLE OR RELEVANT AND APPROPRIATE TO THE REMEDIAL ACTION, AND IS COST-EFFECTIVE. THIS REMEDY SATISFIES THE STATUTORY PREFERENCE FOR REMEDIES THAT EMPLOY TREATMENT THAT REDUCES TOXICITY, MOBILITY, OR VOLUME AS A PRINCIPAL ELEMENT AND UTILIZES PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT TECHNOLOGIES TO THE MAXIMUM EXTENT PRACTICABLE.

BECAUSE THIS REMEDY MAY RESULT IN HAZARDOUS SUBSTANCES REMAINING ON-SITE ABOVE HEALTH-BASED LEVELS, A REVIEW WILL BE CONDUCTED WITHIN FIVE YEARS AFTER THE COMMENCEMENT OF REMEDIAL ACTION TO ENSURE THAT THE REMEDY CONTINUES TO PROVIDE ADEQUATE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT.

DATE: 09/30/91

GREER C. TIDWELL
REGIONAL ADMINISTRATOR

#INT

1.0 INTRODUCTION

1.1 SITE NAME AND LOCATION

THE SMITH'S FARM SITE IS LOCATED IN A RURAL AREA OF BULLITT COUNTY, KENTUCKY, APPROXIMATELY FIFTEEN (15) MILES SOUTH OF LOUISVILLE. THE CERCLA SITE IS THE 500-ACRE SMITH'S FARM PROPERTY APPROXIMATELY 1.5 MILES SOUTHWEST OF BROOKS, JUST NORTH OF PRYOR VALLEY ROAD (FIGURE 1). THE SITE INCLUDES TWO DISPOSAL AREAS WHERE DISPOSAL OF HAZARDOUS WASTE OCCURRED OVER A TWENTY (20) YEAR PERIOD. THE AREA ADDRESSED BY THIS RECORD OF DECISION (ROD) AMENDMENT, IS AN 80-ACRE AREA WHERE NUMEROUS DRUMS CONTAINING HAZARDOUS WASTE WERE BURIED AND SCATTERED. THE AREA IS ON A MILE-LONG RIDGE BETWEEN TWO VALLEY STREAMS. THE MAIN STREAM ON THE SOUTH SIDE OF THE RIDGE IS THE UNNAMED TRIBUTARY WHICH FLOWS SOUTH TO BLUE LICK CREEK (FIGURES 2 AND 3). THE PHASE OF THE REMEDY WHICH WILL ADDRESS THIS DISPOSAL AREA HAS BEEN DESIGNATED OPERABLE UNIT ONE. THE SECOND DISPOSAL AREA, A FORMERLY PERMITTED LANDFILL IN THE SOUTHERN PORTION OF THE SMITH'S FARM SITE, WILL NOT BE ADDRESSED BY OPERABLE UNIT ONE, BUT IS THE SUBJECT OF AN ONGOING REMEDIAL INVESTIGATION AND FEASIBILITY STUDY (RI/FS) AND IS NOT THE SUBJECT OF THIS AMENDMENT.

1.2 LEAD AND SUPPORT AGENCIES

EPA HAS BEEN THE CERCLA LEAD AGENCY SINCE INITIATING AN IMMEDIATE REMOVAL IN 1984 IN THE AREA ADDRESSED BY OPERABLE UNIT ONE. THE SITE WAS RANKED IN 1985-86 AND EPA PLACED THE SITE ON THE NATIONAL PRIORITIES LIST (NPL) IN JUNE 1986. IN 1987 EPA ATTEMPTED TO NEGOTIATE WITH THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO UNDERTAKE A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY (RI/FS). NEGOTIATIONS WERE UNSUCCESSFUL AND EPA UNDERTOOK THE RI/FS UTILIZING ITS OWN CONTRACTOR AND FUND FINANCING.

THE RI/FS WAS COMPLETED IN 1989. THE RECORD-OF-DECISION (ROD) WAS SIGNED IN SEPTEMBER 29, 1989. NEGOTIATIONS FOR IMPLEMENTATION OF THE REMEDIAL DESIGN/REMEDIAL ACTION (RD/RA) BEGAN IN DECEMBER 1989, BUT WERE UNSUCCESSFUL. A UNILATERAL ADMINISTRATIVE ORDER (UAO) FOR IMPLEMENTATION OF THE RD/RA WAS ISSUED TO 36 PRPS IN MARCH 1990. THE REMEDIAL DESIGN AND ASSOCIATED ACTIVITIES HAVE PROCEEDED UNDER AN EPA ENFORCEMENT LEAD.

EPA HAS CONSULTED WITH THE COMMONWEALTH OF KENTUCKY WITH RESPECT TO RESPONSE ACTIVITIES, AND THE COMMONWEALTH HAS REVIEWED AND COMMENTED ON BOTH EPA DECISIONS AND PRP TECHNICAL DOCUMENTS. AT THE OPERABLE UNIT TWO AREA THE COMMONWEALTH OVERSAW DISPOSAL ACTIVITIES UNTIL IT LET THE DISPOSAL PERMIT EXPIRE IN MAY 1989. KENTUCKY DID NOT CONCUR WITH THE ORIGINAL RECORD OF DECISION (ROD) FOR THE AREA ADDRESSED BY OPERABLE UNIT ONE.

1.3 CERCLA SECTION 117 AND NCP SECTION 300.435(C)(2)(II)

THE PUBLIC PARTICIPATION REQUIREMENTS OF BOTH CERCLA SECTION 117 AND SECTION 300.435(C)(2)(II) OF THE NCP HAVE BEEN SATISFIED. A PRESS RELEASE WAS PLACED IN A LOCAL NEWSPAPER, FACT SHEETS WERE SENT TO PERSONS ON EPA'S SITE MAILING LIST, AND AN AVAILABILITY SESSION WAS CONDUCTED AT A LOCAL MEETING PLACE IN MAY 1991. A SECOND NEWSPAPER ADVERTISEMENT DESCRIBING THE PROPOSED FUNDAMENTAL CHANGE WAS PLACED IN A LOCAL NEWSPAPER, ANOTHER FACT SHEET WAS SENT OUT, AND A PUBLIC MEETING WAS HELD IN JULY 1991. THE PUBLIC COMMENT PERIOD WAS THIRTY (30) DAYS LONG. THE DRAFT ROD AMENDMENT WAS SENT TO THE COMMONWEALTH OF KENTUCKY FOR REVIEW AND COMMENT.

1.4 ORIGINAL RECORD-OF-DECISION

THE ORIGINAL RECORD-OF-DECISION (ROD) FOR OPERABLE UNIT ONE WAS SIGNED BY THE REGIONAL ADMINISTRATOR OF REGION IV, GREER C. TIDWELL, ON SEPTEMBER 29, 1989. THE COMMONWEALTH OF KENTUCKY DID NOT CONCUR WITH THE SELECTED REMEDY.

1.5 SUMMARY OF THE CIRCUMSTANCES LEADING TO THE NEED FOR A ROD AMENDMENT

IN MARCH 1984 EPA VISITED THE AREA ADDRESSED BY THIS ROD AMENDMENT AND COLLECTED SAMPLES FROM THE DRUMS AND SPILL AREAS TO DETERMINE IF THE AREA WARRANTED CONSIDERATION FOR CLEANUP. THIS INVESTIGATION REVEALED THAT THE POTENTIAL FOR THE RELEASE OF CHEMICALS FROM THE DRUMS REPRESENTED AN IMMINENT AND SUBSTANTIAL ENDANGERMENT TO PUBLIC HEALTH AND THE ENVIRONMENT, AND QUALIFIED FOR EMERGENCY REMOVAL FUNDS.

FROM JUNE THROUGH AUGUST, 1984, EPA REMOVED SURFACE WASTES, EXCAVATED CONTAMINATED SOILS, AND UNDERTOOK SITE STABILIZATION AND EROSION PREVENTION MEASURES. THE REMOVED SURFACE WASTES INCLUDED 6,000 DRUMS, 2,000 OF WHICH CONTAINED HAZARDOUS WASTE. SOME OF THE WASTES INCLUDED POLYCHLORINATED BIPHENYLS (PCBS), ACIDS, SOLVENTS, PAINTS, BASES, AND VARIOUS ORGANIC COMPOUNDS. DURING THE EMERGENCY REMOVAL ACTION, THE SITE WAS EVALUATED TO DETERMINE THE NEED FOR ADDITIONAL REMEDIAL MEASURES. AS A RESULT OF THE EVALUATION, THE SMITH'S FARM SITE WAS ADDED TO THE NATIONAL PRIORITIES LIST (NPL) ON JUNE 10, 1986 WITH A SCORE OF 32.69 OUT OF A POSSIBLE 100 POINTS ON THE HAZARD RANKING SYSTEM (HRS). LISTING ON THE NPL ALLOWS SUPERFUND MONIES TO BE MADE AVAILABLE FOR REMEDIAL ACTIVITIES.

IN JULY 1987, THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WAS INITIATED. FIELD WORK IN SUPPORT OF THE RI/FS BEGAN IN MARCH 1988, AND THE RI REPORT WAS COMPLETED IN JANUARY 1989. THE DRAFT FS REPORT WAS SUBMITTED TO THE PUBLIC INFORMATION REPOSITORY IN MARCH 1989. IN APRIL 1989 A PUBLIC MEETING WAS HELD TO PRESENT EPA'S PROPOSED PLAN AND TO SOLICIT PUBLIC COMMENTS. THE ROD WAS SIGNED ON SEPTEMBER 29, 1989.

IN DECEMBER 1989, SPECIAL NOTICE LETTERS WERE SENT TO FIFTY-NINE (59) PRPS OFFERING THEM THE OPPORTUNITY TO CONDUCT THE REMEDIAL DESIGN AND REMEDIAL ACTION (RD/RA). NEGOTIATIONS WERE UNSUCCESSFUL AND ON MARCH 14, 1990, EPA SENT A UNILATERAL ADMINISTRATIVE ORDER (UAO) TO THIRTY-SIX (36) OF THE PRPS ORDERING THEM TO CONDUCT THE RD/RA. THEREAFTER, A GROUP OF PRPS SELECTED A DESIGN AND CONSTRUCTION SUPERVISING CONTRACTOR, AND THE RD WAS INITIATED.

DURING THE RD PHASE ADDITIONAL STUDIES WERE CONDUCTED TO ADDRESS ANY PROBLEM AREAS AND TO VERIFY DATA COLLECTED IN PREVIOUS PHASES. ADDITIONAL STUDIES CONSISTED OF: (1) A DETAILED LAND SURVEY; (2) A GRID SAMPLING OF SOILS (BOTH SURFACE AND SUBSURFACE) AND STREAM SEDIMENTS; (3) AN ATTEMPT AT TREATABILITY TESTING FOR THERMAL TREATMENT OF SOILS; (4) TREATABILITY TESTING FOR SOLIDIFICATION/FIXATION OF SOILS; (5) TREATABILITY TESTING FOR BIOLOGICAL AND CHEMICAL TREATMENT OF SOILS; (6) EXPLORATORY TRENCHING AND SAMPLING OF UNEARTHED DRUMS; AND (7) THE DRILLING OF CORE HOLES TO DEPTHS IN EXCESS OF THREE HUNDRED (300) FEET TO DETERMINE THE SITE STRATIGRAPHY. RD INVESTIGATIONS IN THE FALL OF 1990 PRODUCED SOIL SAMPLING DATA WHICH INDICATED SIGNIFICANT DECREASES IN CONCENTRATIONS OF CONTAMINANTS OF CONCERN COMPARED TO THOSE CONCENTRATIONS DESCRIBED IN THE RI IN 1989. IN DECEMBER 1990 EPA CONTRACTED FOR AN INDEPENDENT ASSESSMENT OF THE DIFFERENCES BETWEEN THE RI AND THE RD SOIL DATA. IN FEBRUARY 1991 THE ASSESSMENT WAS COMPLETED. THE REPORT INDICATED THAT THE RD SAMPLING AND ANALYSIS EFFORT WAS VALID AND ACCEPTABLE. CROSS-CHECKS OF SPLIT SAMPLING DATA BY EPA INDICATED THAT THE PRPS, RD DATA WAS ACCEPTABLE. THE DRAFT PRELIMINARY (30 PERCENT) REMEDIAL DESIGN REPORT WAS APPROVED BY EPA IN FEBRUARY 1991. THE DRAFT INTERMEDIATE (60 PERCENT) DESIGN REPORT WAS SUBMITTED TO EPA ON AUGUST 1, 1991.

1.6 ADMINISTRATIVE RECORD

THE REQUIREMENTS SET FORTH IN SECTION 300.825(A)(2) OF THE NCP HAVE BEEN SATISFIED. ALL MAJOR DOCUMENTS THAT FORM THE BASIS FOR THE DECISION TO MODIFY THE RESPONSE ACTION HAVE BEEN ADDED TO THE ADMINISTRATIVE RECORD FILE.

1.7 ADMINISTRATIVE RECORD AVAILABILITY

THE ADMINISTRATIVE RECORD FILE IS AVAILABLE FOR VIEWING BY THE PUBLIC DURING REGULAR BUSINESS HOURS AT THE FOLLOWING LOCATIONS:

RIDGEWAY MEMORIAL LIBRARY
WALNUT STREET
P.O. BOX 146
SHEPERDSVILLE, KENTUCKY 40165
(502) 543-7675

USEPA REGION IV RECORDS CENTER
GROUND FLOOD
345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365
(404) 347-0506

COPIES OF DOCUMENTS IN THE ADMINISTRATIVE RECORD FILE MAY ALSO BE OBTAINED FROM EPA'S REGION IV RECORDS CENTER IN ATLANTA BY WRITING TO THE FREEDOM-OF-INFORMATION ACT (FOIA) COORDINATOR AND REQUESTING A COPY OF THE SMITH'S FARM ADMINISTRATIVE RECORD INDEX. CHOICES OF DOCUMENTS FROM THE INDEX MAY BE EXPRESSED IN ADDITIONAL FOIA REQUESTS.

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2.0 REASONS FOR ISSUING THE ROD AMENDMENT

2.1 DESCRIPTION OF THE REMEDY SELECTED IN THE ORIGINAL RECORD OF DECISION

SECTION 8.0, PAGE 67, OF THE ORIGINAL ROD SPECIFIED ALTERNATIVE 4: CAPPING OF AREA A, INCINERATION AND SOLIDIFICATION/FIXATION OF AREA B AS THE MOST APPROPRIATE REMEDY FOR OPERABLE UNIT ONE. THE FOLLOWING TWO PARAGRAPHS ARE QUOTED FROM THE ORIGINAL ROD:

"APPROXIMATELY 26,200 CUBIC YARDS OF CONTAMINATED SOIL, SURFACE DRUMS, BURIED DRUMS, AND FILL MATERIAL WILL BE EXCAVATED FROM AREA B. APPROXIMATELY 5,200 CUBIC YARDS OF CONTAMINATED ON-SITE SEDIMENTS WILL ALSO BE EXCAVATED FROM THE INTERMITTENT VALLEY STREAMS WITHIN THE STUDY AREA OF THE SMITH'S FARM SITE. THE CONTAMINATED SEDIMENTS AND MATERIAL FROM AREA B WILL BE TREATED USING A THERMAL DESTRUCTION UNIT. APPROXIMATELY 50 PERCENT OF THE TREATED MATERIAL WILL THEN BE FURTHER TREATED BY SOLIDIFICATION/FIXATION. SOLIDIFIED MATERIAL AND TREATED SOILS WILL THEN BE RETURNED FOR PLACEMENT INTO AREA B.

WASTES WITHIN AREA A WILL BE CONSOLIDATED AND CAPPED WITH AN ENGINEERED CAP IN ACCORDANCE WITH FEDERAL AND STATE REQUIREMENTS. IN ADDITION TO CAPPING AREA A, THE ALTERNATIVE INCLUDES THE INCINERATION OF AN AS YET UNDETERMINED BUT MINOR VOLUME OF MATERIAL IN AREA A. PRIOR TO CAPPING, EXPLORATORY INVESTIGATIONS WILL BE PERFORMED IN AREA A TO FURTHER DEFINE THE VOLUME AND NATURE OF CONTAMINANTS WITHIN THAT AREA. UPON COMPLETION OF THE REMEDIAL DESIGN AND/OR THE WASTE CONSOLIDATION, REGRADING, AND EXPLORATORY INVESTIGATION OF AREA A, THE EXACT VOLUME AND LOCATION OF MATERIAL IN AREA A THAT WILL BE INCINERATED WILL BE DETERMINED. CRITERIA THAT WILL BE USED TO DETERMINE THE MATERIAL TO BE INCINERATED ARE THE NUMBERS AND LOCATIONS OF INTACT DRUMS OR WASTE "HOT SPOTS" THAT ARE UNCOVERED IN AREA A AND COST CONSIDERATIONS. THE TREATMENT OF SELECTED AREA A WASTES WOULD BE THE SAME AS THE TREATMENT OF AREA B WASTES."

THE CLEANUP OR ACTION LEVELS THAT FOLLOW ARE TAKEN FROM TABLE 20, PAGE 68, OF THE ORIGINAL ROD.

ACTION LEVELS FOR SOILS AND SEDIMENTS

CONTAMINANT	MEDIA	UNIT	ACTION LEVEL	RISK LEVEL
LEAD	SOIL	MG/KG	500	(10-6)
PAHS	SEDIMENT	MG/KG	5	(10-5)
PAHS	SOIL	MG/KG	2	(10-5)
PCBS	SEDIMENT	MG/KG	2	(10-5)

2.2 SUMMARY OF RATIONALE FOR CHANGING REMEDY SELECTED IN THE ORIGINAL RECORD-OF-DECISION

2.2.1 COMPARISON OF RI AND RD SOIL DATA.

PRELIMINARY REMEDIAL DESIGN (PRD) GRID SAMPLING AND ANALYSES INDICATED LOWER LEVELS OF CONTAMINANTS OF CONCERN, ESPECIALLY PCBS, THAN DEMONSTRATED DURING THE RI (REFER TO THE ORIGINAL ROD, SECTIONS 5.2.1, 5.2.2, 5.2.5, 6.3.1, 6.3.2, 6.3.4, 6.5.1.1, 6.5.1.2, AND 6.5.1.4.). PRD SOIL DATA WAS COMPARED WITH THE RI SOIL DATA AND EACH DATA SET WAS DEEMED TO BE VALID (REFER TO ENCLOSED APPENDIX 7.3.). UTILIZING BOTH THE SURFACE AND THE SUBSURFACE PRD SOIL DATA AND THE LATEST GRID SURVEY POINTS AND THE ORIGINAL ACTION LEVELS FOR THE THREE CONTAMINANTS OF CONCERN (PCBS, PAHS, AND LEAD), NEW CONTAMINATED SOIL VOLUMES WERE CALCULATED. THE NEW VOLUME OF SOILS FOR TREATMENT WAS CALCULATED TO BE APPROXIMATELY 16,000 CUBIC YARDS. THE PRIOR ESTIMATE WAS 31,400 CUBIC YARDS.

2.2.2 NEW ESTIMATE OF SOIL VOLUME.

SOIL SAMPLES WERE TAKEN FROM AREA B AND ANALYZED FOR CONTAMINANTS OF CONCERN AS A PRELUDE TO TREATABILITY TESTING. THE SAMPLES DID NOT CONTAIN HIGH ENOUGH LEVELS OF PCBS TO BE INCINERATED TO DEMONSTRATE THE RCRA-REQUIRED 99.9999 PERCENT DESTRUCTION REMOVAL EFFICIENCY (DRE).

SOIL SAMPLING AND ANALYSES IN AREA A INDICATE LOW LEVELS OF PCBS. SEDIMENT SAMPLING AND ANALYSES ALONG THE INTERMITTENT STREAM ON THE WEST SIDE OF THE RIDGE DEMONSTRATED NONDETECTABLE AND LOW LEVELS OF PCBS.

2.2.3 CHANCE IN REMEDIATION TECHNOLOGY

LOWER CONCENTRATIONS OF PCBS HAVE BEEN DISCOVERED AND THE VOLUME OF CONTAMINATED SOIL TO BE TREATED HAS BEEN ESTIMATED TO BE MUCH LOWER THAN ORIGINALLY THOUGHT, THEREFORE, INCINERATION (THERMAL TREATMENT) HAS BECOME INFEASIBLE AND OTHER TECHNOLOGIES HAVE BEEN EXAMINED FOR THEIR APPLICABILITY AND RELIABILITY. BIOLOGICAL AND CHEMICAL TECHNOLOGIES WERE EXAMINED. ENSITE'S SAFE-SOIL (SM) PROCESS WAS DISCARDED AFTER AN UNSUCCESSFUL TEST WAS COMPLETED. GALSON REMEDIATION'S APEG-PLUS (SM)(ALKALINE POLYETHYLENE GLYCOL) PROCESS FOR DECHLORINATION OF PCBS WAS UTILIZED IN A SUCCESSFUL TREATABILITY TEST. ADDITIONALLY, THE BEST (BASIC EXTRACTION SLUDGE TREATMENT) PROCESS, WHICH REMOVES HYDROCARBONS, AND WHICH IS INCLUDED IN THE SUPERFUND INNOVATIVE TECHNOLOGY (SITE) PROGRAM, IS BEING UTILIZED IN A TREATABILITY TEST. OTHER CHEMICAL TREATMENT TECHNOLOGIES FOR DECHLORINATION OF PCBS MAY BE DEMONSTRATED TO BE APPLICABLE BY MEANS OF TREATABILITY TESTS. SOLIDIFICATION/FIXATION TREATABILITY TESTS HAVE ALSO ACHIEVED SATISFACTORY RESULTS WITH RESPECT TO THE CONTAMINANTS OF CONCERN (REFER TO ENCLOSED APPENDIX 7.4.).

2.2.4 CONCLUSION.

IN CONCLUSION, BECAUSE LOWER LEVELS OF PCBS WERE DISCOVERED DURING THE PRELIMINARY REMEDIAL DESIGN INVESTIGATION, IT WAS DETERMINED THAT A LOWER VOLUME OF SOIL THAN ORIGINALLY ESTIMATED WOULD NEED TO BE TREATED. INCINERATION OF A LOW VOLUME OF SOIL IS POSSIBLE, BUT THE COST PER UNIT VOLUME IS RELATIVELY HIGH GIVEN THAT MOBILIZATION/DEMobilIZATION COSTS REMAIN APPROXIMATELY THE SAME NO MATTER WHAT QUANTITY OF SOIL IS BEING TREATED.

AS SOIL VOLUMES AND CONTAMINANT (PCB) CONCENTRATIONS DECREASE OTHER TECHNOLOGIES BECOME MORE FEASIBLE. A CHEMICAL DECHLORINATION OR HYDROCARBON REMOVAL PROCESS, SUCH AS APEG OR BEST, RESPECTIVELY, ARE MORE APPLICABLE WITH SMALLER SOIL VOLUMES CHIEFLY BECAUSE THEY WORK WITH SMALLER SCALE BATCH PROCESSING MACHINERY AND HAVE RELATIVELY LOW MOBILIZATION/DEMobilIZATION COSTS. SOLIDIFICATION/FIXATION PROCESSES ARE ALSO A DEMONSTRATED METHOD OF TREATMENT OF THE CONTAMINATED SOILS AT THE SITE.

3.0 DESCRIPTION OF THE MODIFIED REMEDY

3.1 COMPARISON OF THE ORIGINAL SELECTED REMEDY WITH THE MODIFIED REMEDY

3.1.1 TREATMENT COMPONENT.

3.1.1.1 ORIGINAL REMEDY'S TREATMENT COMPONENT.

ORIGINALLY, APPROXIMATELY 26,200 CUBIC YARDS OF CONTAMINATED SOILS AND FILL MATERIAL FROM AREA B WERE TO BE EXCAVATED; APPROXIMATELY 5,200 CUBIC YARDS OF CONTAMINATED ON-SITE SEDIMENTS WERE TO BE EXCAVATED FROM THE INTERMITTENT VALLEY STREAMS WITHIN THE OPERABLE UNIT ONE STUDY AREA. EXPLORATORY INVESTIGATIONS WERE TO BE PERFORMED IN AREA A TO DEFINE THE VOLUME AND NATURE OF CONTAMINANTS WITHIN THE AREA. SELECTED CONTAMINATED MATERIAL IN AREA A WAS TO BE SUBJECTED TO TREATMENT CONTINGENT UPON THE VOLUME OF MATERIAL TO BE TREATED AND COST CONSIDERATIONS. AREA A WASTE, AREA B WASTE, AND WASTES FROM PROXIMAL AREAS WERE TO BE KEPT SEPARATE. SELECTED SOILS AND SEDIMENTS FROM AREAS A AND B, AND PROXIMAL AREAS, WERE TO BE INCINERATED ON-SITE. THE INCINERATED MATERIAL WAS TO BE ANALYZED FOR LEAD. THOSE VOLUMES OF TREATED MATERIAL WITH CONCENTRATIONS OF LEAD AT OR OVER THE LEAD ACTION LEVEL WERE TO BE TREATED BY SOLIDIFICATION/FIXATION. INCINERATED MATERIALS HAVING LEAD LEVELS LESS THAN THE LEAD ACTION LEVEL WERE TO BE PLACED BACK INTO THEIR ORIGINAL AREAS. SOLIDIFIED MATERIALS ORIGINALLY FROM AREA B AND PROXIMAL AREAS WERE TO BE RETURNED TO AREA B. SOLIDIFIED AREA A MATERIALS WERE TO BE RETURNED TO AREA A. REFER TO SECTION 8.0, PAGE 67, AND SECTIONS 7.3 AND 7.4, PAGES 59-62, OF THE ORIGINAL ROD; AND TO SECTIONS 3.3 AND 3.4, PAGES 3-14 THROUGH 3-26, OF THE FEASIBILITY STUDY.

3.1.1.2 MODIFIED REMEDY'S TREATMENT COMPONENT.

APPROXIMATELY 16,000 CUBIC YARDS OF CONTAMINATED SOILS IN AREA B (AREA OF CONTAMINATION "B") WILL BE EXCAVATED TO THE UNDERLYING ROCK (OR TO A SHALLOWER DEPTH AT WHICH CONTAMINATION IS INDICATED TO BE BELOW ACTION LEVELS). CONTAMINATED SOILS, SEDIMENTS, AND DEBRIS FROM THE WEST SIDE OF AREA A, AND CONTAMINATED SOILS, SEDIMENTS, AND DEBRIS FROM AN AREA IMMEDIATELY SOUTHEAST OF AREA A (IN AND AROUND SAMPLE LOCATION AS-23) WILL NOT BE TREATED, BUT CONSOLIDATED IN AREA A SINCE THEY ARE IN THE AREA A AREA OF CONTAMINATION. UNEARTHED DRUMS, METAL OBJECTS, AND SIMILAR DEBRIS EXCAVATED FROM AREA B WILL BE DECONTAMINATED UTILIZING BEST MANAGEMENT PRACTICES, OVERPACKED, AND THE OVERPACKS PLACED IN A SHALLOW GRAVE IN AREA A PRIOR TO CAPPING. SELECTED AREA B SOILS WILL BE TREATED ON-SITE BY A CHEMICAL PROCESS DESIGNED TO DECHLORINATE PCBS IN (SUCH AS THE APEG PROCESS) OR TO REMOVE HYDROCARBONS FROM (SUCH AS THE BEST PROCESS) CONTAMINATED SOILS AND BY A SOLIDIFICATION/FIXATION PROCESS DESIGNED TO IMMOBILIZE THE REMAINING CONTAMINANTS OF CONCERN WHICH ARE AT OR ABOVE THE ACTION LEVELS (THIS TREATMENT TRAIN MUST HAVE BEEN DEMONSTRATED TO ACHIEVE THE CLEANUP LEVELS ESTABLISHED IN THE ORIGINAL RECORD OF DECISION.). DURING FULL-SCALE OPERATION ON-SITE, CONTAMINANT CLEANUP LEVELS MUST BE ACHIEVED

WITHIN A REASONABLE TIME PURSUANT TO THE SCHEDULE IN THE EPA-APPROVED REMEDIAL ACTION WORK PLAN. ALL TREATED MATERIAL FROM AREA B WILL BE PLACED IN AREA A UNDER THE CAP. FOR MORE DETAILED INFORMATION REFER TO SECTION 3.1, PAGES 14-28, OF THE DRAFT INTERMEDIATE DESIGN REPORT AND TO SECTIONS 3.3 AND 3.4, PAGES 3-14 THROUGH 3-26, IN THE FEASIBILITY STUDY. EXPLORATORY INVESTIGATIONS WERE PERFORMED IN AREA A DURING THE REMEDIAL DESIGN INVESTIGATION.

3.1.2 CONTAINMENT COMPONENT.

3.1.2.1 ORIGINAL REMEDY'S CONTAINMENT COMPONENT.

WASTES PLACED WITHIN AREA A WERE TO BE CONSOLIDATED AND CAPPED WITH AN ENGINEERED CAP IN ACCORDANCE WITH RCRA REQUIREMENTS. ACCORDING TO SECTION 3.2 OF THE MARCH 1989 FEASIBILITY STUDY BY EBASCO, APPROXIMATELY 900 LINEAR FEET OF RETAINING WALL WERE TO BE BUILT ALONG THE WEST SIDE OF AREA A AT THE BASE OF THE SLOPE AT LEAST 25 FEET FROM THE INTERMITTENT STREAM. A SHORT DOUBLE RETAINING WALL WAS TO BE BUILT ALONG THE NORTHEAST PORTION OF AREA A. A LEACHATE COLLECTION SYSTEM WAS TO BE INTEGRATED WITH THE PERIMETER RETAINING STRUCTURES. SURFACE RUN-ON AND RUN-OFF STRUCTURES WERE TO BE INSTALLED.

3.1.2.2 MODIFIED REMEDY'S CONTAINMENT COMPONENT.

REINFORCED CONCRETE RETAINING WALLS WILL BE BUILT ALONG MOST OF THE WEST SIDE OF AREA A AND DOUBLE, REINFORCED CONCRETE RETAINING WALLS ARE TO BE BUILT ALONG A SECTION OF THE NORTHEAST SIDE OF AREA A. OTHER ENGINEERED RETAINING STRUCTURES WILL BE BUILT ALONG THE PERIMETER OF AREA A, WHERE APPROPRIATE. A LEACHATE COLLECTION SYSTEM WILL BE INTEGRATED WITH THE PERIMETER RETAINING STRUCTURES; LEACHATE WILL BE COLLECTED IN STORAGE TANK(S) OF AN APPROPRIATE SIZE AND ARRANGEMENTS WILL BE MADE FOR PROPER ON-SITE OR OFF-SITE TREATMENT AND DISPOSAL OF LEACHATE. SURFACE RUN-ON/RUN-OFF CONTROL SYSTEMS WILL BE DESIGNED FOR A 50-YEAR 24-HOUR RAIN EVENT. AREA A WILL BE CAPPED UTILIZING A RCRA CAP WHICH MAY INCLUDE A BENTONITE MATTING COMPONENT. THE RCRA CAP WILL INCLUDE A SYNTHETIC GEOMEMBRANE (HDPE OR EQUIVALENT) OF AT LEAST 30 MIL THICKNESS. REFER TO SECTIONS 3.2 THROUGH 3.5, PAGES 29 THROUGH 46, IN THE DRAFT INTERMEDIATE DESIGN REPORT.

3.1.3 GROUND WATER COMPONENT.

3.1.3.1 ORIGINAL REMEDY'S GROUND WATER COMPONENT.

GROUND WATER WAS TO BE MONITORED ANNUALLY FOR UP TO TWENTY-SEVEN (27) YEARS AFTER CONSTRUCTION WAS COMPLETE. GROUND WATER WAS TO BE SAMPLED ANNUALLY FOR ALL TCL COMPOUNDS AND NOT FOR TAL CONSTITUENTS (UNLESS THE WEIGHT OF EVIDENCE INDICATED OTHERWISE) IN ALL OPERABLE UNIT ONE MONITORING WELLS (MW-1 THROUGH MW-15). REFER TO SECTION 5.2.3, PAGE 16, OF THE ORIGINAL ROD AND TO SECTION 2.2.4.6, PAGE 2-19, OF THE FEASIBILITY STUDY.

3.1.3.2 MODIFIED REMEDY'S GROUND WATER COMPONENT.

GROUND WATER IS TO BE MONITORED ANNUALLY FOR TCL CONSTITUENTS AND BIENNIALY FOR TAL CONSTITUENTS FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION IS COMPLETE. MONITORING WELLS MW-3 THROUGH MW-8 AND MW-11 THROUGH MW-15 WILL BE SAMPLED. ADDITIONAL MONITORING WELLS WILL BE INSTALLED IF DETERMINED BY EPA TO BE NECESSARY.

DURING CONSTRUCTION OF THE RETAINING WALLS AND OTHER NEAR-STREAM STRUCTURES ASSOCIATED WITH AREA A, PRECAUTIONS WILL BE TAKEN IN ORDER TO SAVE THE EXISTING MONITORING WELLS.

3.1.4 GENERAL COMPONENTS.

3.1.4.1 ORIGINAL REMEDY'S GENERAL COMPONENTS.

ACCESS TO THE AREA ADDRESSED BY OPERABLE UNIT ONE WAS TO BE RESTRICTED BY FENCING AROUND THE CONTAMINATED AREAS.

THE RCRA CAP WAS TO BE MAINTAINED FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION WAS COMPLETE.

THE LEACHATE COLLECTION SYSTEM WAS TO BE MAINTAINED FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION WAS COMPLETE.

COLLECTED LEACHATE WAS TO BE TRANSPORTED OFF-SITE FOR TREATMENT AND DISPOSAL AT AN EPA-APPROVED FACILITY FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION WAS COMPLETE. REFERENCE IS MADE TO SECTION 7.2, PAGE 58, OF THE ORIGINAL ROD.

3.1.4.2 MODIFIED REMEDY'S GENERAL COMPONENTS.

ACCESS TO THE AREA ADDRESSED BY OPERABLE UNIT ONE WILL BE RESTRICTED BY FENCING AREAS A AND B AT THE LEAST. THE FENCING WILL BE MAINTAINED FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION IS COMPLETE.

NECESSARY ACCESS ROADS WILL BE MAINTAINED FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION IS COMPLETE.

THE RCRA CAP AND SURFACE RUN-ON/RUN-OFF CONTROL STRUCTURES AS WELL AS THOSE HYDRAULIC ENERGY DISSIPATION AND SEDIMENTATION STRUCTURES ASSOCIATED WITH THE PROXIMAL STREAM BEDS WILL BE MAINTAINED FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION IS COMPLETE.

THE LEACHATE COLLECTION SYSTEM WILL BE MAINTAINED FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION IS COMPLETE.

COLLECTED LEACHATE WILL BE TRANSPORTED OFF-SITE FOR TREATMENT AT AN EPA-APPROVED FACILITY, OR TREATED ON-SITE AND DISCHARGED (BY PERMIT, IF NECESSARY) TO THE UNNAMED TRIBUTARY, FOR UP TO THIRTY (30) YEARS AFTER CONSTRUCTION IS COMPLETE.

ARRANGEMENTS WILL BE MADE FOR THE INSTITUTION OF LAND-USE RESTRICTIONS FOR THE FENCED AREAS AND FOR ANY OTHER PROXIMAL OR ASSOCIATED AREAS WHICH MAY BE DETERMINED BY EPA TO NEED RESTRICTED ACCESS.

3.1.5 MAJOR ARARS.

3.1.5.1 ORIGINAL REMEDY'S MAJOR ARARS.

THE ARARS WHICH WERE ASSOCIATED WITH THE ORIGINAL REMEDY ARE SET FORTH IN SECTION 8.2, PAGES 70 THROUGH 73, OF THE ORIGINAL ROD.

3.1.5.2 MODIFIED REMEDY'S MAJOR ARARS.

WITH THE EXCEPTION OF THE ARARS IN SECTION 8.2 OF THE ORIGINAL ROD WHICH APPLY DIRECTLY TO INCINERATION, THE SAME ARARS APPLY TO THE MODIFIED REMEDY. IN ADDITION, ANY DISCHARGES OF TREATED LEACHATE WILL BE IN COMPLIANCE WITH CERCLA SECTION 121(E) AS WELL AS ALL SUBSTANTIVE CLEAN WATER ACT (CWA) AND FEDERAL AND STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. IF DISCHARGE OCCURS OFF-SITE, AN NPDES PERMIT WILL BE OBTAINED. IF UNDERGROUND STORAGE TANKS ARE UTILIZED IN THE LEACHATE COLLECTION SYSTEM, THEN THE APPLICABLE UNDERGROUND STORAGE TANK (UST) REQUIREMENTS MUST BE MET.

WITH REGARD TO SECTION 8.2.1.A, FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), OF THE

ORIGINAL ROD, THE APPLICATION OF LAND DISPOSAL RESTRICTIONS (LDRS) AS SET FORTH IN 40 CFR PART 268 IS EXPLAINED IN MORE DETAIL IN SECTION 4.1.2.2 BELOW.

#EMR

4.0 EVALUATION OF THE MODIFIED REMEDY

4.1 PROFILES OF THE ORIGINAL SELECTED REMEDY AND THE MODIFIED REMEDY USING THE NINE CRITERIA IN CERCLA AND THE NCP

4.1.1 OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT.

4.1.1.1 ORIGINAL REMEDY.

THE ORIGINAL REMEDY WOULD HAVE SERVED TO CONTAIN CONTAMINANTS WITHIN AREA A, THEREBY ELIMINATING OR GREATLY REDUCING INFILTRATION OF RAINFALL INTO THE AREA. THIS WOULD HAVE ELIMINATED THE PATHWAYS FOR EXPOSURE. REFER TO THE ORIGINAL ROD, SECTION 8.1, PAGES 69-70, AND TO SECTION 7.6.1, PAGE 65.

4.1.1.2 MODIFIED REMEDY.

THE MODIFIED REMEDY WOULD SERVE TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT IN THE SAME FASHION AS THE ORIGINAL REMEDY.

4.1.2 COMPLIANCE WITH ARARS.

4.1.2.1 ORIGINAL REMEDY.

REFER TO THE ORIGINAL ROD, SECTION 8.1, PAGES 69-70, AND TO SECTION 7.6.2, PAGE 65.

4.1.2.2 MODIFIED REMEDY.

THE MODIFIED REMEDY COMPLIES WITH ARARS IN THE SAME MANNER AS THE ORIGINAL REMEDY, BUT WITHOUT THE NECESSITY FOR COMPLYING WITH THE ARARS PERTAINING SPECIFICALLY TO INCINERATION. REFER TO SECTION 8.2, PAGE 70, OF THE ORIGINAL ROD.

SECTION 8.2.1.A, FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), OF THE ORIGINAL ROD, STATES THAT "40 CFR PART 268 SUBPART D REQUIRES TREATMENT BY THE BEST DEMONSTRATED AVAILABLE TECHNOLOGY (BDAT) BEFORE LAND DISPOSAL OF RCRA-SIMILAR WASTES. THE TREATMENT OF WASTES EXCAVATED FROM THE STUDY AREA WILL MEET THIS REQUIREMENT."

IN THE AREA ADDRESSED BY OPERABLE UNIT ONE, AREAS A AND B ARE CONSIDERED SEPARATE AREAS OF CONTAMINATION (AOCS). AREA B SOIL AND DEBRIS WILL BE CONSIDERED TO BE RCRA CHARACTERISTIC WASTE UNTIL PROVEN OTHERWISE OR UNLESS THE WASTE IS REGULATED BY ANOTHER STATUTE, SUCH AS TOSCA. PLACEMENT OCCURS WHEN MOVING TREATED SOIL AND DEBRIS FROM AREA B TO AREA A. CURRENTLY, CONTAMINATED SOIL AND DEBRIS AT CERCLA SITES ARE SUBJECT TO THE SAME TREATMENT STANDARDS AS THE PROHIBITED HAZARDOUS WASTES THAT THEY CONTAIN, UNLESS A VARIANCE IS APPROPRIATE AND APPROVED ACCORDING TO 40 CFR SECTION 268.44.

4.1.3 LONG-TERM EFFECTIVENESS AND PERMANENCE

4.1.3.1 ORIGINAL REMEDY.

THE LONG-TERM EFFECTIVENESS AND PERMANENCE OF THE ORIGINAL REMEDY IS DESCRIBED IN SECTION 8.1, PAGES 67 THROUGH 70, AND IN SECTION 7.6.3, PAGE 65.

4.1.3.2 MODIFIED REMEDY.

THE MODIFIED REMEDY WILL SATISFY THIS REQUIREMENT IN THE SAME WAY AS THE ORIGINAL REMEDY.

4.1.4 REDUCTION OF TOXICITY, MOBILITY OR VOLUME THROUGH TREATMENT.

4.1.4.1 ORIGINAL REMEDY.

THESE REDUCTIONS WERE DESCRIBED IN THE ORIGINAL ROD, PAGES 67 THROUGH 70, AND IN SECTION 7.6.4, PAGE 65.

4.1.4.2 MODIFIED REMEDY.

THE MODIFIED REMEDY ACHIEVES THESE REDUCTIONS IN THE SAME WAY AS THE ORIGINAL REMEDY.

4.1.5 SHORT-TERM EFFECTIVENESS.

4.1.5.1 ORIGINAL REMEDY.

THIS REQUIREMENT IS DISCUSSED IN THE ORIGINAL ROD IN SECTION 8.1, PAGES 67 THROUGH 70, AND IN SECTION 7.6.5, PAGE 66.

4.1.5.2 MODIFIED REMEDY.

THE MODIFIED REMEDY WOULD MEET THIS REQUIREMENT IN MUCH THE SAME MANNER AS THE ORIGINAL REMEDY. AREA B CONTAMINATED SOILS WOULD BE TREATED AND PLACED IN AREA A PRIOR TO THE CAPPING OF AREA A. THUS AREA B REMEDIATION WOULD OCCUR RAPIDLY. AREA A INTERIM CONTAINMENT AND CONTROL MEASURES WOULD MITIGATE THE SHORT-TERM ENDANGERMENT; AS SOON AS THE RETAINING STRUCTURES ARE IN PLACE AROUND AREA A AND THE SYNTHETIC GEOMEMBRANE APPLIED TO THE GRADED SURFACE OF AREA A CONTAINMENT WILL BE COMPLETE, WITH THE EXCEPTION OF THE INSTALLATION OF THE REMAINING COMPONENTS OF THE RCRA CAP.

4.1.6 IMPLEMENTABILITY

4.1.6.1 ORIGINAL REMEDY

THE IMPLEMENTABILITY OF THE ORIGINAL REMEDY IS DESCRIBED IN THE ORIGINAL ROD IN SECTION 8.1, PAGES 67 THROUGH 70, AND IN SECTION 7.6.6, PAGE 66.

4.1.6.2 MODIFIED REMEDY.

THE MODIFIED REMEDY IS AS IMPLEMENTABLE AS THE ORIGINAL REMEDY, AND PERHAPS MORE SO SINCE THE LARGE INCINERATOR AND ASSOCIATED MACHINERY WILL BE REPLACED WITH CHEMICAL PROCESSING OR STABILIZATION EQUIPMENT WHICH IS EXPECTED TO PRODUCE FEWER MOBILIZATION AND SET-UP PROBLEMS.

4.1.7 COST.

4.1.7.1 ORIGINAL REMEDY.

THE COST ESTIMATE FOR THE ORIGINAL REMEDY WAS APPROXIMATELY \$27,000,000.

4.1.7.2 MODIFIED REMEDY.

THE COST OF THE MODIFIED REMEDY HAS BEEN ESTIMATED TO BE \$22 - \$25 MILLION.

4.1.8 STATE ACCEPTANCE.

4.1.8.1 ORIGINAL REMEDY.

THE COMMONWEALTH OF KENTUCKY DID NOT CONCUR WITH THE ORIGINAL ROD WHICH WAS SIGNED IN SEPTEMBER 1989. REFER TO THE ORIGINAL ROD, SECTION 7.6.8, PAGE 66.

4.1.8.2 MODIFIED REMEDY.

THE COMMONWEALTH HAS BEEN GIVEN A REASONABLE TIME OF NOT LESS THAN TEN (10) WORKING DAYS TO REVIEW AND COMMENT ON THE ROD AMENDMENT. THE COMMONWEALTH HAS INDICATED THAT IT CANNOT GIVE SPECIFIC COMMENTS ON THE ROD AMENDMENT WITHIN A REASONABLE TIME AND REFERRED TO THEIR JANUARY 8, 1991 DRAFT PRELIMINARY REMEDIAL DESIGN COMMENTS. THE COMMONWEALTH HAS BEEN GIVEN AN OPPORTUNITY TO DISCUSS SPECIFIC ARARS WITH RESPECT TO THE ROD AMENDMENT, BUT HAS INDICATED THAT IT CANNOT DO SO IN A REASONABLE TIME. THE COMMONWEALTH'S CONCERNS AND EPA'S RESPONSES TO THOSE CONCERNS ARE CONTAINED IN ATTACHMENT 7.2.2. THE COMMONWEALTH CONCURS WITH THE SUBSTITUTION OF CHEMICAL TREATMENT FOR INCINERATION, BUT CONTINUES TO OBJECT TO THE OVERALL SOLUTION FOR REMEDIATION OF THE SITE. THE COMMONWEALTH'S LETTER OF SEPTEMBER 26, 1991 IS ATTACHMENT 7.2.3.

4.1.9 COMMUNITY ACCEPTANCE.

4.1.9.1 ORIGINAL REMEDY.

THE COMMUNITY EXPRESSED SERIOUS CONCERNS ABOUT THE USE OF AN INCINERATOR AT THE SITE, BUT ACCEPTED THE ORIGINAL REMEDY. REFER TO THE ORIGINAL ROD, SECTION 7.6.9, PAGE 66, AS WELL AS TO THE RESPONSIVENESS SUMMARY ATTACHED TO THE ORIGINAL ROD.

4.1.9.2 MODIFIED REMEDY.

THE MODIFIED REMEDY WAS GENERALLY ACCEPTABLE TO THE COMMUNITY. REFER TO THE RESPONSIVENESS SUMMARY, SECTION 6.2, IN THIS AMENDMENT.

#STD

5.0 STATUTORY DETERMINATIONS

5.1 SATISFACTION OF CERCLA SECTION 121

THE REMEDIATION GOALS AS EXPRESSED IN THE ORIGINAL ROD IN SECTION 8.1, PP. 67-70, REMAIN THE SAME. THE DISCUSSION CONCERNING REMEDIATION GOALS, ATTAINMENT OF ARARS, COST-EFFECTIVENESS, UTILIZATION OF PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT TECHNOLOGIES TO THE MAXIMUM EXTENT PRACTICABLE, AND PREFERENCE FOR TREATMENT AS A PRINCIPAL ELEMENT REMAIN ESSENTIALLY THE SAME. THEREFORE, THE APPLICABLE PORTIONS OF CERCLA SECTION 121 HAVE BEEN SATISFIED.

#COMR

6.0 COMMUNITY RELATIONS

6.1 COMMUNITY RELATIONS ACTIVITIES

THE SEPTEMBER 1989 OPERABLE UNIT ONE ROD WAS BASED UPON THE RI COMPLETED IN JANUARY 1989. A PUBLIC INFORMATION MEETING WAS HELD ON MARCH 12, 1988 TO ADDRESS EXISTING COMMUNITY CONCERNS AND TO PROVIDE THE COMMUNITY WITH INFORMATION ABOUT THE STUDIES THAT WERE CONDUCTED OR THAT WERE PLANNED FOR THE SITE. AFTER THE RELEASE OF THE FEASIBILITY STUDY TO THE PUBLIC, ANOTHER PUBLIC MEETING TO DESCRIBE CURRENT CONDITIONS AT THE SITE, THE ALTERNATIVES CONSIDERED FOR SITE CLEANUP, AND THE PREFERRED ALTERNATIVE FOR CLEANUP WAS HELD ON APRIL 11, 1989. THE ROD WAS

SIGNED ON SEPTEMBER 29, 1989.

ON MAY 9, 1991 A MEETING WAS CONDUCTED IN CONJUNCTION WITH THE TRI-CITY INDUSTRIAL DISPOSAL SITE PROPOSED PLAN PUBLIC MEETING. A FACT SHEET FOR THE SMITH'S FARM SITE WAS SENT OUT WITH THE PROPOSED PLAN FACT SHEETS FOR THE TRI-CITY SITE GIVEN THAT MANY OF THE INTERESTED PARTIES ARE THE SAME. THE SMITH'S FARM FACT SHEET CONTAINED A DESCRIPTION OF THE PROPOSED FUNDAMENTAL CHANGE TO THE ORIGINAL REMEDY. ON JULY 15, 1991, A NOTICE APPEARED IN A LOCAL NEWSPAPER DESCRIBING THE PURPOSE OF A PUBLIC MEETING TO OCCUR ON JULY 18, 1991, AND OPENING THE PUBLIC COMMENT PERIOD. THE PUBLIC MEETING OCCURRED ON JULY 18, 1991 WITH TELEVISION AND NEWSPAPER COVERAGE. THE PUBLIC COMMENT PERIOD EXTENDED FROM JULY 15, 1991 THROUGH AUGUST 15, 1991.